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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,749	04/30/2001	W. Kenneth Wilkinson		4248

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10/03/2002

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EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 10/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/843,749

Applicant(s)
Wilkinson

Examiner
Rabon Sergeant

Art Unit
1711



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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1. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within the claims, the following terms render the claims indefinite, because the terminology is subjective: relatively high molecular weight (claims 1 and 3); low molecular weight (claims 1, 2, 8, 9, 10, 13, 15, 20, 23, and 25); discrete distances (claim 7); small amount (claim 8); high mixing conditions (claims 10 and 20); and minor amount (13, 14, 15, 16, 23, 24, 25, and 26).

Within claim 1, the language, "above about 200,000", "above about 0.6", and "above about 400%", renders the claims indefinite, because "about" causes values slightly above and below the specified values to be encompassed; therefore, it is unclear if the "above about" language actually encompasses the specified values, as well as those slightly below.

Within claims 2 and 3, the language, "the second low molecular weight diol" and "the first relatively high molecular weight diol", lack antecedent basis. Additionally, "the second low molecular weight diol" language is confusing, because it can be easily interpreted that there are two low molecular weight polyols.

Within claim 5, it is unclear what is meant by "isomeric mixtures of said aliphatic or aromatic monomers"; does the language refer to actual mixtures of both aliphatic and aromatic compounds or does the language merely refer to mixtures of aliphatic isomers or mixtures of aromatic isomers?

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The ratios set forth within steps b) and e) of claim 10 are confusing, because it is conventional within the art to unitize one side of the ratio to make the ratios easier to interpret. Furthermore, within step b) of claim 10, the ratio is recited as being the mole ratio of diisocyanate to prepolymer; however, within the specification, at page 9, the ratio is the molar ratio of isocyanate groups to hydroxyl groups.

Within step c) of claim 10, a temperature condition must be specified for the viscosity.

Within claim 26, the word, "claim", has been omitted prior to 25.

Within claims 11-16 and 21-26, the term, "Spandex-like", is improper, because, firstly, Spandex is a tradename and tradenames should not be used within the claims, and, secondly, the suffix, "-like", so extends the scope of the term that it is rendered indefinite.

2. Claims 7 and 10-29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear what linkages are encompassed by the "hard" and "soft" terminology.

3. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has failed to specify the type of molecular weight (number average or weight average) for the high molecular weight polyurethane and the relatively high molecular weight diol or how they have been determined.

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4. Claims 20-29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Within step b) of claim 20, a diisocyanate and a polyol are mixed at a ratio to provide excess hydroxyl groups; therefore, all of the diisocyanate should be consumed in the reaction; however, according to step c), a mixture of polymer and unreacted diisocyanate is obtained. It is unclear how the excess diisocyanate can exist if the hydroxyl reactant is used in excess.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-9, 12, 14, 16, 22, 24, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Seneker et al. ('118 or '357).

Patentees disclose the production of Spandex-type fibers, wherein isocyanate terminated prepolymers, produced from a blend of a high molecular weight polyol and a low molecular weight polyol, are chain extended with an aliphatic amine. See abstracts and columns 6-10. Patentees additionally disclose that the fibers have high elongation and molecular weights which meet those claimed by applicant. Since the fibers are produced from equivalent reactants and have overlapping molecular weights, the position is taken that applicant's claimed elongation and tenacity values are inherent properties of the disclosed fibers. The position is further taken that no

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evidence has been provided to indicate that the processes causes the products by process to have a patentable distinction.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.


RABON SERGENT
PRIMARY EXAMINER

R. Sergent

September 28, 2002